

ABSTRACT OF THE DISCLOSURE

A high-pressure mercury lamp is provided that includes a transparent envelope made of quartz glass, in which mercury, halogen, and a rare gas are sealed and a pair of electrodes provided in the transparent envelope. The amount of the halogen sealed in the transparent envelope is in the range from $1.0 \times 10^{-6} \mu\text{mol}/\text{mm}^3$ to $1.0 \times 10^{-2} \mu\text{mol}/\text{mm}^3$, and 2.5 mol% to 25 mol% of oxygen with respect to the amount of the halogen is present in the transparent envelope. The high-pressure mercury lamp can prevent blackening of an inner wall of the transparent envelope from occurring over a long period of lighting without deteriorating the startability or lamp characteristics, thus achieving a long life.